

# VIRGINIA

## Science and Engineering Profile

	Virginia	U.S.	Rank		Virginia	U.S.	Rank
Doctoral scientists, 1993	12,802	430,332	10	Total R&D performance, 1993 (millions)	\$2,939	\$161,427	13
Doctoral engineers, 1993	2,630	81,293	11	Industry R&D, 1993 (millions)	\$1,087	\$117,622	21
S&E doctorates awarded, 1993	647	25,409	11	Academic R&D, 1993 (millions)	\$403	\$19,489	15
of which, in engineering	26%	22%		of which, in life sciences	52%	55%	
in life sciences	21%	24%		in engineering	20%	16%	
in social sciences	15%	15%		in environmental sciences	11%	7%	
S&E postdoctorates, 1993				Higher education current-fund			
in doctorate-granting institutions	604	34,394	18	expenditures, 1993 (millions)	\$3,822	\$163,994	11
S&E graduate students, 1993				Number of SBIR awards, 1990-93	743	13,995	4
in doctorate-granting institutions	12,281	438,128	10	Patents issued to state residents, 1994	858	56,039	20
Population, 1994 (000s)	6,552	260,341	12	Gross state product, 1992 (billions)	\$153.8	\$5,994.1	12
Civilian labor force, 1994 (000s)	3,422	131,013	12	of which, agriculture	1%	2%	
Personal income per capita, 1994	\$22,594	\$21,809	14	manufacturing, mining, construction	21%	23%	
Federal spending				transportation, communication, utilities	9%	9%	
Total expenditures 1994 (millions)	\$45,890	\$1,284,896	8	wholesale and retail trade	14%	16%	
R&D obligations 1993 (millions)	\$3,403	\$65,394	4	finance, insurance, real estate	16%	18%	
				services	19%	20%	
				government	20%	12%	

Rankings and totals are based on data for the 50 States and D.C.

## Federal Obligations for Research and Development in Virginia by Agency and Performer: Fiscal Year 1993

[Thousands of dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
<b>Total, all agencies</b>	3,402,556	1,226,598	162,068	1,748,093	201,668	53,272	10,857	4
<b>Department of Agriculture</b>	11,349	1,599	0	99	8,625	958	68	36
<b>Department of Commerce</b>	21,826	8,488	0	11,542	1,335	0	461	7
<b>Department of Defense</b>	2,357,051	898,111	128,160	1,281,230	29,273	18,834	1,443	4
<b>Department of Energy</b>	54,012	9,169	28,250	6,197	8,305	2,091	0	18
<b>Dept. of Health &amp; Human Services</b>	170,281	50	0	63,012	96,406	8,016	2,797	17
<b>Department of the Interior</b>	41,883	31,464	0	8,313	2,101	0	5	2
<b>Department of Transportation</b>	35,138	11,003	5,658	15,278	1,088	0	2,111	4
<b>Environmental Protection Agency</b>	57,487	21,758	0	34,344	1,040	0	345	2
<b>Nat'l Aeronautics &amp; Space Admin.</b>	606,192	243,089	0	322,872	22,285	14,319	3,627	5
<b>National Science Foundation</b>	47,337	1,867	0	5,206	31,210	9,054	0	11
<b>State rank</b>	4	4	8	5	17	12	6	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable

Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources.